Mission Planner BAA Questions and Answers

- Q: Does payload planning include dynamic sensor resource management? If so, will it interact with mission planning/replanning?
- A: We're not sure what you mean by "dynamic sensor resource management". If you mean having the planner optimize a plan by indicating the best sensor to use based on given criteria, it is not included.
- Q: Non-proprietary software is prioritized as a Minimum Criteria in the Eval Plan and as a High Priority in the viewgraph package. Is it correct to assume that this requirement is a High Priority?
- A: Yes; the documents are being updated to reflect this change and will be available by COB 2 May 97 on the TCS Home Page.
- Q: Data Entry Validation and Store/Retrieve/Delete mission plans are prioritized as High Priority in the Eval Plan but did not appear explicitly in the viewgraph package. Is it correct to assume that these requirements are both High Priorities?
- A: Data Entry Validation was lowered to a Low Priority because TCS shall supply the HCI for Mission Planning. The documents are being updated to reflect this change and will be available by COB 2 May 97 on the TCS Home Page. Store/Retrieve/Delete mission plan is a High Priority requirement.
- Q: EO/IR Payload Control and Payload Pointing Commands are prioritized as High Priority in the Eval Plan but did not appear explicitly in the viewgraph package. Is it correct to assume that these requirements are both High Priorities?

A: Yes.

- Q: The viewgraph package identified Open Architecture to Support Other AV Types and Open Architecture to Support Other Payloads as High Priorities. The Eval Plan identified the Open Architecture to Support Payloads (C-38) as a High Priority, but did not identify a corresponding explicit Open Architecture for Other AV Types requirement. The Eval Plan does identify a requirement to be Expandable to Support Rotary Wing, VTOL, and Other UAV Systems, but as a Medium Priority. So, when it come to "supporting other AV types", which document contains the correct requirement and priority?
- A: Expandable and Open Architecture were being used interchangeably; the priority for each is correct in the viewgraphs. The documents are being updated and will be available by COB 2 May 97 on the TCS Home Page.

Q: The viewgraph package identifies a Communications Planning requirement, at Medium Priority. There is no corresponding requirement in the Eval Plan or Criteria Document. Is this a real requirement, if so, is it at Medium Priority, and is there a definition?

A: Yes, there is a medium priority requirement for communications planning. A definition of this requirement will be included in the documents that are being updated and will be available by COB 2 May 97 on the TCS Home Page.

Q: Is it correct to assume that the Low Priority requirements in the Eval Plan are still in effect and were omitted from the viewgraph package because of their priority for the purposes of the briefing presentation?

A: Yes.

Q: What functions are in the route and payload planners, as opposed to the GUI and Data Server? Where would vehicle and payload models reside? Terrain models and/or checking?

A: Data Server and HCI contains no UAV functionality. Data Server only knows how to move data; HCI only knows how to display data to the operator. UIM has no knowledge of the "context" of the data. The only thing UIM does is error checking of entered data (e.g., int must be an integer, real must be a float). Also, UIM does range checking based upon data supplied by an application. The AV and payload models will reside in the mission planner; the mission planner should use JMTK with NIMA data for the terrain models and/or checking.

Q: What is the relationship between TCS and AFMSS/TAMPS? Will the system integrator be expected to host TCS software on AFMSS/TAMPS hardware or will we adopt AFMSS/TAMPS functions (threat analysis, route deconfliction, route fly-through) to UAVs using TCS?

A: TCS must be interoperable with AFMSS/TAMPS (e.g., for exchange of "route data"). Route/payload planning is not intended to run on an AFMSS/TAMPS system but they can be either co-located or not. When TCS is co-located with an AFMSS/TAMPS system, AFMSS/TAMPS will be doing the initial route planning and TCS will provide dynamic retasking. When they are not co-located, tools are needed to provide the TCS operator with the necessary route planning functionality for the job he is doing.

Q: Doesn't seem like HCI is a part of this BAA -- if not, when will it be addressed during Phase I - III procurement?

A: The BAA goal is to integrate the mission planner into the TCS architecture as an application interfacing with the Data Server and UIM. The mission planner will not be a

stand-alone product with its own HCI. HCI is another application already under development in TCS.

- Q: There has been no mention of security issues associated with the TCS architecture. Is the intent to keep TCS operations independent of classified data? If not, how will the architecture adapt to various levels of secure operation?
- A: Currently there are no requirements for classified software in TCS. However, the architecture is being designed to accommodate future security needs.
- Q: What will the interface be with other key information and planning services extant within the theater of operations? (AFMSS/TAMPS/weather/etc.)
- A: The mission planner does not directly interface with external systems; the mission planner will interface with external systems via the Data Server.
- Q: What roles do Dahlgren and other government labs intend to play? To what extent do they plan to perform any future software development and maintenance themselves? What are the industry and government roles in each phase?
- A: NSWCDD will remain the TCS software integration agent. TCS software development and maintenance will be performed by the TCS software development team comprised of NSWCDD, other government labs and industry vendors. Assuming satisfactory performance, the mission planner developer will remain with the TCS program for mission planning for Phase II and beyond.
- Q: What sort of tasks would be welcome in the white paper? Integration of software? Enhancements to meet all TCS requirements? Rehosting to other platforms? Support of government integration/demo/exercise support efforts? Studies?
- A: The outline for the white paper was provided in the industry brief and is available in the industry brief viewgraph package on the TCS Home Page.
- Q: What kind of funding is available for this BAA and what size tasks are sought? What is the current funding plan for TCS and how much is allocated to acquisition?
- A: The funding available for this BAA was provided in the industry brief and is available in the industry brief viewgraph package on the TCS Home Page. The second question is beyond the scope of this BAA.
- Q: Is the ROM cost to cover the effort we propose in the white paper? The entire TCS? Software upgrades to meet medium or high level requirements? Development or operational cost?

A: The ROM cost is to cover any necessary upgrades/modifications to meet medium and high level requirements, as detailed in the criteria document. The ROM does not need to give cost estimates for work beyond the BAA contract.

Q: Does the BAA require that source code be delivered as part of the proposed BAA task? Two adjacent sentences appear somewhat contradictory. Is not having non-proprietary software a disqualifier?

A: The TCS program has requested source code to manage and control TCS's multiplatform environment. As was briefed on April 21, the TCS requirement is for unlimited distribution rights. If any vendor is not willing to grant unlimited distribution rights, then that vendor shall identify the parts of the code (functionality, percent of code, etc.) is not covered by the unlimited distribution rights requirements and shall identify a set of conditions whereby the entire code can be distributed.

Q: Are the medium and high level requirements referenced in the BAA to be provided in the draft Mission Planning Design Requirements? Or are they in the ORD?

A: All requirements (low, medium and high) for the mission planner can be found in the TCS Mission Planner Criteria Document.

Q: Are multiple white papers from one firm welcome?

A: Yes; however, there should be only one paper per mission planner.

Q: *Is there any blackout?*

A: We don't understand this question.

Q: Where are the interfaces to the C4I and AV elements, and are they available to us? Owned by the government?

A: The mission planner will not directly interface with the C4I and AV elements. These interfaces, however, are being defined and will be available within the TCS program.

Q: When will the RFP for this white paper, Phase I and Phase II be released?

A: The BAA and Industry Brief served as the RFP for this white paper.

Q: In what way do you believe the current UAV ground stations are unable to grow?

A: This question does not pertain to this BAA.

Q: Can a white paper be classified?

- A: White papers may be classified if necessary, but the actual classified part(s) should be identified and included as an attachment to the unclassified parts. (Note: The unclassified white paper and its classified attachment should together equal no more than the allowed seven pages.) Unless the appropriate clearances are granted to the members of the Evaluation Team, the classification can be no higher than Secret.
- Q: How much functionality development do you anticipate will remain to be done by the Phase II Integrator?
- A: There is a distinction between the Phase II system integrator and the mission planner developer. The scope of this BAA is limited to the development of the mission planner and does not address system integration.
- Q: If most of the TCS software is developed by the incumbent Phase I team, what steps will be taken to bring the Phase II contractor up to speed for implementation? Will the Phase I contractors have a significant competitive advantage for Phase II source selection?
- A: Assuming satisfactory performance, the Phase I mission planner developer will remain with the TCS program for the mission planning function for Phase II and beyond.
- Q: Has the standard HCI been defined? If so, is it available to contractors?
- A: The HCI is currently being defined.
- Q: Many of our products were developed for classified customers. Will you accept the white paper at the same security level as the current customer? Can the demo be at the same security level?
- A: White papers may be classified if necessary, but the actual classified part(s) should be identified and included as an attachment to the unclassified parts. (Note: The unclassified white paper and its classified attachment should together equal no more than the allowed seven pages.) Similarly, demonstrations, briefings, etc., during the fine evaluation site visit may be classified. Unless the appropriate clearances are granted to the members of the Evaluation Team, the classification can be no higher than Secret.
- Q: How do we get involved in the community review of documents, especially for route planner and mission planner?
- A: Community review of TCS documents is performed by members of the TCS community, comprised of government labs and industry vendors on the TCS project.
- Q: What capabilities are to be available for demo? Are you looking to evaluate current capabilities? May we provide briefings to augment the demonstration?

- A: We are looking to evaluate the capabilities as indicated in the criteria document. Technical briefings, meetings, etc., to further explain your system's capabilities are welcome.
- Q: Will mission/sensor planning criteria be available in softcopy?
- A: The document can be found on the TCS Home Page.
- Q: Can we submit a 7-page white paper for a mission planner and a 7-page white paper for a sensor planner?
- A: We assume you mean "route planner" when you say "mission planner"; in our terminology "mission planner" includes a route planner and a payload planner. You may submit separate white papers for a route planner and a payload planner, but each submission will be judged against all the mission planning criteria on its own merit.
- Q: Does "portable to all DoD-supported platforms" include a strategy to implement TCS functionality in the NT environment? (Bill mentioned a PC capability -- Is this to be done in a PC-UNIX/LINUX environment?)
- A: This will be a two-step process: (1) TCS UIM software will be ported to a PC/NT machine (timeframe 1998+); (2) After a complete DII environment is defined for a PC/NT, then TCS will look at the issues of porting TCS functionality (timeframe 2000+).
- Q: Does our proposed software need to be hosted and working on Sun, HP and SGI today?
- A: The proposed software does not need to be working on the Sun and HP platforms today but must transition to these platforms (in the configurations specified in the criteria document) during the course of the BAA. As briefed April 21, the white paper should include information regarding the platforms (Sun, HP, etc.) on which the proposed software is currently hosted and working and the estimated level of effort to meet all the high and medium level criteria on both the Sun and HP. Hosting the software on an SGI is a low priority criteria and is not required during the course of the BAA.
- Q: What latitude is available for companies to maintain certain routing and payload algorithms as non-exclusive rights? What latitude do the contractors have in providing non-proprietary software that is in the form of an executable?
- Q: Can software drivers, or linkable objects, be provided to the TCS SPO in place of the "software" request as it would provide the same level of interoperability and functionality?
- A: We at NSWCDD are interpreting these two questions as the same. The TCS program has requested source code to manage and control TCS's multi-platform environment.

Presently the TCS program supports two platforms, the Navy's TAC series (HP) and the Army's CHS-II (Sun - Sparc) family of computers. The TCS program is not going to supply and maintain a development and test environment at each vendor's site. The TCS program expects each vendor to maintain on environment to develop and test software.

Q: Does the TCS SPO deem non-proprietary software, provided for exclusive use on the TCS Program only, to be "minimum criteria" compliant?

A: As was briefed on April 21, the TCS requirement is for unlimited distribution rights. If any vendor is not willing to grant unlimited distribution rights, then that vendor shall identify the parts of the code (functionality, percent of code, etc.) is not covered by the unlimited distribution rights requirement and shall identify a set of conditions whereby the entire code can be distributed.

Q: How will Windows NT-based TCS software play in an operational deployment?

A: Operational deployment is beyond the scope of this BAA.

Q: For existing software product proposals, what is the DII/COE compliance level?

A: As briefed on April 21, level 6 is the minimum DII/COE compliance level.

Q: What code is provided to SPO/user during source selection and does it need to be source code? Will the winner of Phase II contract (system integration) be given our software?

A: The TCS program has requested source code to manage and control TCS's multiplatform environment. As was briefed on April 21, the TCS requirement is for unlimited distribution rights. If any vendor is not willing to grant unlimited distribution rights, then that vendor shall identify the parts of the code (functionality, percent of code, etc.) is not covered by the unlimited distribution rights requirements and shall identify a set of conditions whereby the entire code can be distributed.

Q: What funding levels are available for this BAA and will it be a cost plus type contract?

A: As briefed on April 21, the BAA will be a CPFF contract. Funding levels are available in the viewgraph package.

Q: The CBD announcement for the TCS white paper request asks for the "estimated effort to include medium level requirements" but the TCS Industry Day Briefing Slides only asked for the "Effort Required for the High Priority Criteria". We were told that the Industry Day briefs were the latest and therefore the data to use; would we omit the effort required to perform the Medium Priority Criteria?

A: We agree that there is a difference between the BAA announcement and the Industry Brief. The requirement is to include the effort required to include both the high and the medium priority criteria. The documents are being updated and will be available on the TCS Home Page by COB 2 May 97.

Q: With the Navy choosing Windows NT as its operating system to move to by 2000, how does this affect TCS's dependence on UNIX only GCCS/CCE?

A: Yes, NT has been selected by the Navy, but in most cases the applications will still run on a UNIX platform and the PC/NT platform will be used as an operator HCI Interface. The bulk of JMCIS/DII functionality will remain UNIX based.

Q: Our route and payload planning software runs on Sun workstations located in an area requiring B-2 SAR access, and employs data classified as B-2 SAR. Is a demonstration requiring B-2 SAR access acceptable to the government?

A: Demonstrations may be classified, if necessary. Unless the appropriate clearances are granted to the members of the Evaluation Team, the classification may be no higher than Secret.